


BROADBAND EXPANSION GRANT APPLICATION

For Fiscal Year 2022

Primary Applicant (Name and Address): Sheboygan County Economic Development Corp. 508 New York Ave., Room 209 Sheboygan, WI 53081	Applications MUST be UPLOADED to ERF via the Commission's website, http://psc.wi.gov/apps35/ERF_upload/content/mymenu.aspx . Refer to section 2.3 for detailed instructions. Applications are due and MUST be uploaded to ERF no later than: March 17, 2022 at 4:00pm (16:00) Central Time. Late applications will not be accepted.	
Contact for further information: PSCStatebroadbandoffice@wisconsin.gov		
Date: December 1, 2021		
The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2022 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. This grant round will be funded with bond proceeds authorized by the Wisconsin Building Commission pursuant to Wis. Stat. § 13.48(30). As such, successful applicants are subject to the requirements of Wis. Stat. § 13.48(30). Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the State.		
Applicant Certification: In signing this application, the undersigned verifies under penalty of perjury that the Applicant and its employees and agents have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition with respect to this application; that no attempt has been made to induce any other person or firm to submit or not to submit an application; that this application has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this application has not been knowingly disclosed prior to the opening of applications to any other applicant or competitor; that all of the responses and representations of Applicant in this application are true and correct to the best of the undersigned's knowledge, information, and belief; and that Applicant agrees to, accepts, and will comply with all of the terms and conditions respecting this application and any award of a broadband expansion grant as may be established in a grant award Agreement.		
Name of Authorized Representative (Type or Print) Brian Doudna	Title Executive Director	Phone (920) 452-2479
Signature of Authorized Representative 	Date March 11th, 2022	

Primary Applicant Name Sheboygan County Economic Development Corporation, Inc.	Amount of Broadband Grant Request (round to nearest dollar) \$1,364,000.00
Federal Employer Identification No. 39-1487364	Amount of Matching Funds Pledged (round to nearest dollar) \$1,806,000.00
Contact Name and Title Brian Doudna – Executive Director Sheboygan County Economic Development Corporation, Inc. (SCEDC)	Total Cost of Proposed Project (round to nearest dollar) \$3,170,000.00
Telephone Number (920) 946-9378	Project Name Village of Random Lake Highway 57 Phase I & II
E-mail Address(es) doudna@sheboygancountyedc.com	Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.) FTTH
Grant Manager, if different than Primary Applicant James (Bertram)	Type of Proposed Project (Last-mile, Middle-Mile, backbone, other) Last-Mile and Middle-Mile fiber network project
Grant Manager Contact Name James Bertram	Grant Manager Email Address and Telephone Number jim@bertramwireless.com (920) 994-2388
<p>If the application proposes a public-private partnership, list the names, addresses, and FEINs of the partner companies or organizations</p> <p>Organization: Sheboygan County Economic Development Corporation, Inc. 508 New York Avenue, Room 209 Sheboygan, WI 53081 FEIN: 39-1487364</p> <p>Partner: Bertram Communications LLC 300 Industrial Drive Random Lake, WI 53075 FEIN: 65-1259683</p>	
<p>Brief Project Description (2 sentences)</p> <p>To provide the unserved/underserved Village of Random Lake and Town of Rhine, connected by Highway 57, to access fiber internet through a two phase project. The fiber technology will provide up to 1x1Gbps symmetrical connections which is greater than the required speeds for the funding opportunity.</p>	
Maximum Proposed Download Transmission Speed 1Gbps	Maximum Proposed Upload Transmission Speed 1Gbps

Minimum Proposed Download Speed to Customer Location 100Mbps	Minimum Proposed Upload Transmission Speed to Customer Location 100Mbps
County or Counties served by this project Sheboygan County	Community or Communities served by this project Village of Random Lake, Highway 57 from the Village of Random Lake to the Town of Rhine
List of the broadband service providers, if any, currently serving the area the applicant proposes to serve Frontier Communications offers Asymmetric xDSL fixed wireless technology at 12.0Mbps download speed and 1.0Mbps upload speeds	
Does proposed project serve an <u>unserved</u> area of the State, as defined in Section 1.4 of the application instruction? (yes/no) YES	Is the Applicant certified as a Broadband Forward! Community or Telecommuter Forward! Community, or does the grant project propose to serve a Broadband Forward! Community or Telecommuter Forward! Community? (yes/no) Yes, to all questions above
For last mile projects or component the expected number of Business Locations that will have access to the improved broadband service (i.e., total business locations passed or with new service access). 25	For last mile projects or components the expected number of Residential Locations that will have access to the improved broadband service (i.e., total residential locations passed or with new service access). 1,221
Of the improved business locations, how many locations are <i>unserved</i> ? 12	Of the improved residential locations, how many are <i>unserved</i> ? 1,221
For providers that are eligible telecommunications carriers will the proposed broadband service be available to Lifeline customers? (yes/no) YES	Are there any programs available for low-income households to access low-cost service or discounts? (yes/no) YES
Is the internet service provider currently participating in the Emergency Broadband Benefit Program? (yes/no) YES	Is the internet service provider currently participating in the Department of Public Instruction and CESA purchasing's Digital Learning Bridge? (yes/no) YES
Did the internet service provider participate in the Public Service Commission's voluntary Broadband Coverage Data Collection in 2021? (yes/no) YES	

FY22 Broadband Expansion Grant Application

Budget & Income Summary



Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

Grant Summary

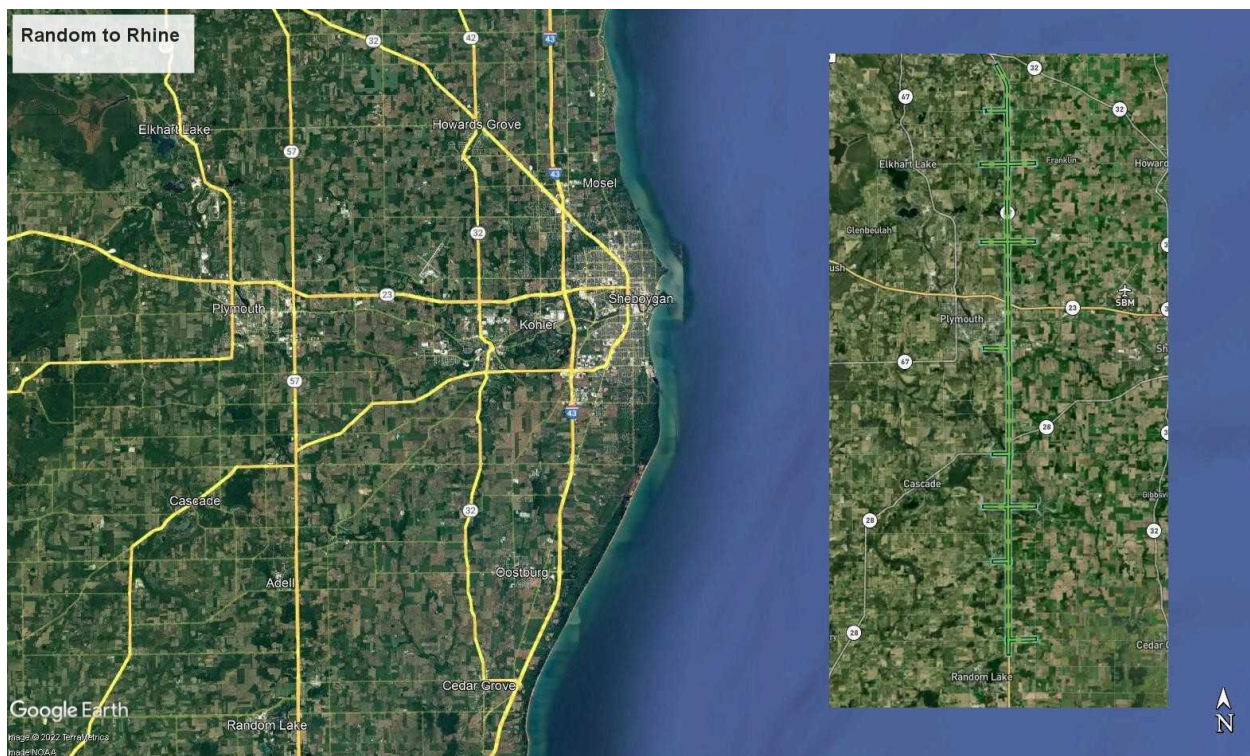
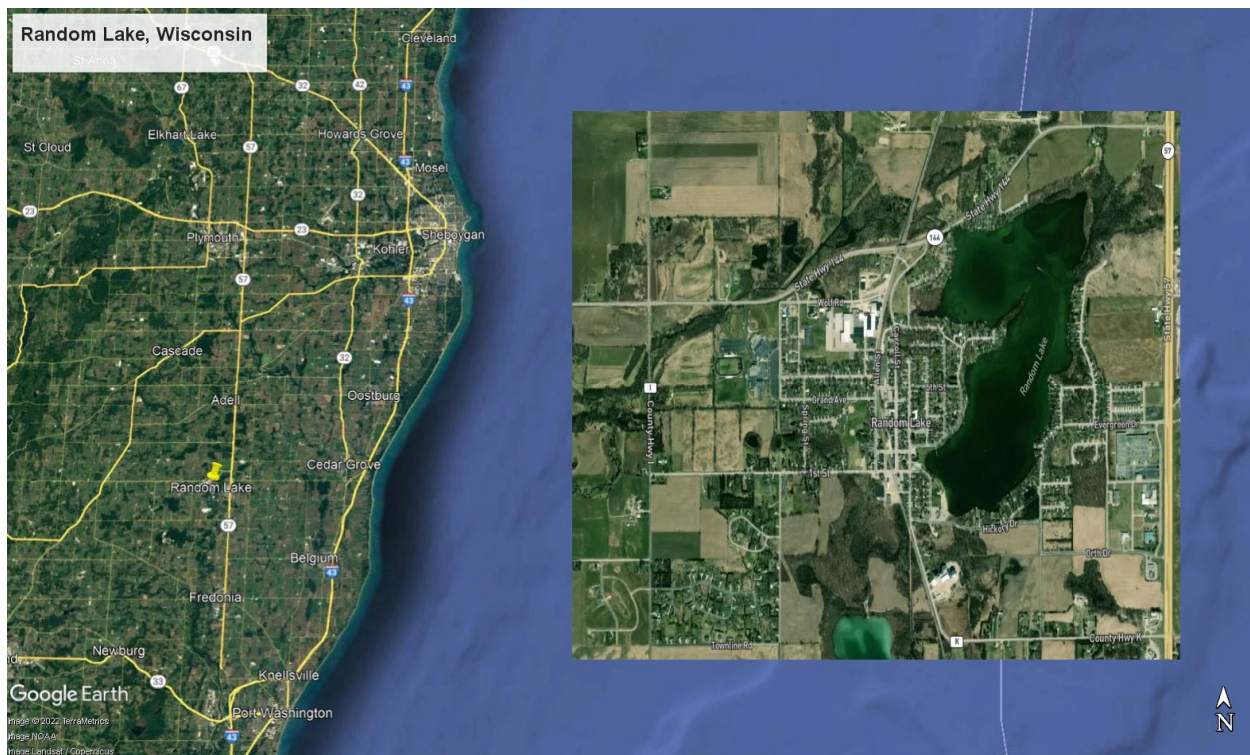
Grant Applicant: Sheboygan County Economic Development Corporation, Inc.	Project: Village of Random Lake Highway 57 Phase I & II

Budget

Line:	Description / Category:	Grant Funds:	Match:	Total:
1	Contractual, Consultant Fees	\$ 152,000.00	\$ 44,676.00	\$ 196,676.00
2	Equipment	\$ 305,000.00	\$ 150,210.00	\$ 455,210.00
3	Supplies	\$ 907,000.00	\$ 568,963.00	\$ 1,475,963.00
4	Labor (Salary, Fringe)	\$ -	\$ 1,042,151.00	\$ 1,042,151.00
5	Permitting, Licensing Fees	\$ -	\$ -	\$ -
6	Travel	\$ -	\$ -	\$ -
7	Other	\$ -	\$ -	\$ -
Total:		\$ 1,364,000.00	\$ 1,806,000.00	\$ 3,170,000.00
				57.0% match requested

Pledged Contributions

#:	Entity:	Entity Type:	Pledge Type:	Pledge:
1	Village of Random Lake	Other	Cash	\$ 686,000.00
2	Random Lake School District	Other	Cash	\$ 90,000.00
3	Bertram Communications LLC	Partner	In-Kind	\$ 607,000.00
4	Bertram Communications LLC	Partner	Cash	\$ 423,000.00
5				
6				
7				
8				
9				
10				
Total:				\$ 1,806,000.00



Applicant Identification and Contact Information

Applicant:

Sheboygan County Economic Development Corporation, Inc.
508 New York Avenue, Room 209
Sheboygan, WI 53081
FEIN: 39-1487364
Brian Doudna
doudna@sheboygancountyedc.com
(920) 946-9378

Partner:

Bertram Communications LLC
300 Industrial Drive
Random Lake, WI 53075
FEIN: 65-1259683
James Bertram
jim@bertramwireless.com
(920) 994-2388

Description of the Project

The “Village of Random Lake Highway 57 Phase I & II”, which is a Last-Mile and Middle-Mile project, will provide access to the unserved/underserved areas of the Village of Random Lake, the Town of Rhine, and the communities in between. The Town of Rhine has been identified as an unserved/underserved area, expansion of broadband services aids in increasing their possibilities for on-going economic development and sustainability. The Village of Random Lake Highway 57 Phase I and II project has the potential to reach 1,221 unserved/underserved households and 25 businesses along the infrastructure route of Highway 57. Highway 57 connects the Village of Random Lake to the Town of Rhine and all townships in between. Historically, the Town of Rhine is rich in natural resources and activities that attract a large tourist community, offering tourist and seasonal residents ongoing activities throughout the year. Elkhart Lake, one of the communities located in the Town of Rhine, Elkhart Lake, is home to Road America, a world renowned racetrack which attracts 800,000 visitors annually, and the Osthoff Resort, a four Diamond premier vacation destination which offers 245 spacious suites. This project will provide a maximum of 1x1Gbps to start, but has the ability to scale based on demand requirements for the future. This project is specifically Fiber to the Home (FTTH) using an active fiber technology solution in which the fiber is buried. This will allow the service provider to offer the residences and businesses multiple options for service. The most noteworthy item is that the highest option being offered is significantly higher than the required 100Mbps x 100Mbps symmetrical speed.

The proposed project will target Last-Mile and Middle-Mile infrastructure. The Village of Random Lake is serving as our Last-Mile, where the fiber will be active. In order for the Town of Rhine to gain access to that fiber we must expand it through the connect point of Highway 57. It is of critical importance to note that this project does address unserved and underserved areas in Sheboygan County. This broadband expansion initiative will continue to bolster the county’s workforce to operate remotely. It will also enable housing developments to take advantage of the new broadband access.

This project will use Active (AON) fiber technology to provide FTTH for the entirety of the project area. We are using a “dig once” philosophy. The Middle-Mile route and the surrounding areas throughout the entire county of Sheboygan will be able to access the fiber. The fiber will be buried and the number of strands will be 288. While this ARPA grant requires 100x100Mbps, **this project will provide 1x1Gbps to start, but has the ability to scale based on demand requirements for the future.**

The design and installation of this project will conform to all applicable federal, state, and local requirements and standard engineering practices and the installed infrastructure will provide the service levels and speeds stated in this application.

This project will **EXCEED** the ARPA Broadband Access requirement of providing a service to unserved or underserved households and businesses to reliably meet a symmetrical speed of 100Mbps download and upload; or in cases where the symmetrical 100/100Mbps service is not practicable, provide a service designed to reliably meet or exceed a 100Mbps download speed and between 20Mbps and 100Mbps upload speed, and be scalable to a minimum of 100Mbps download speed and 100Mbps upload speed. Interim Rule, C.F.R. § 35.6(e)(2), 86 Fed. Reg. 26786, 26823. This project will deliver 1x1Gbps symmetrical service.

The fiber solution which is AON and buried along with the required termination components has the following:

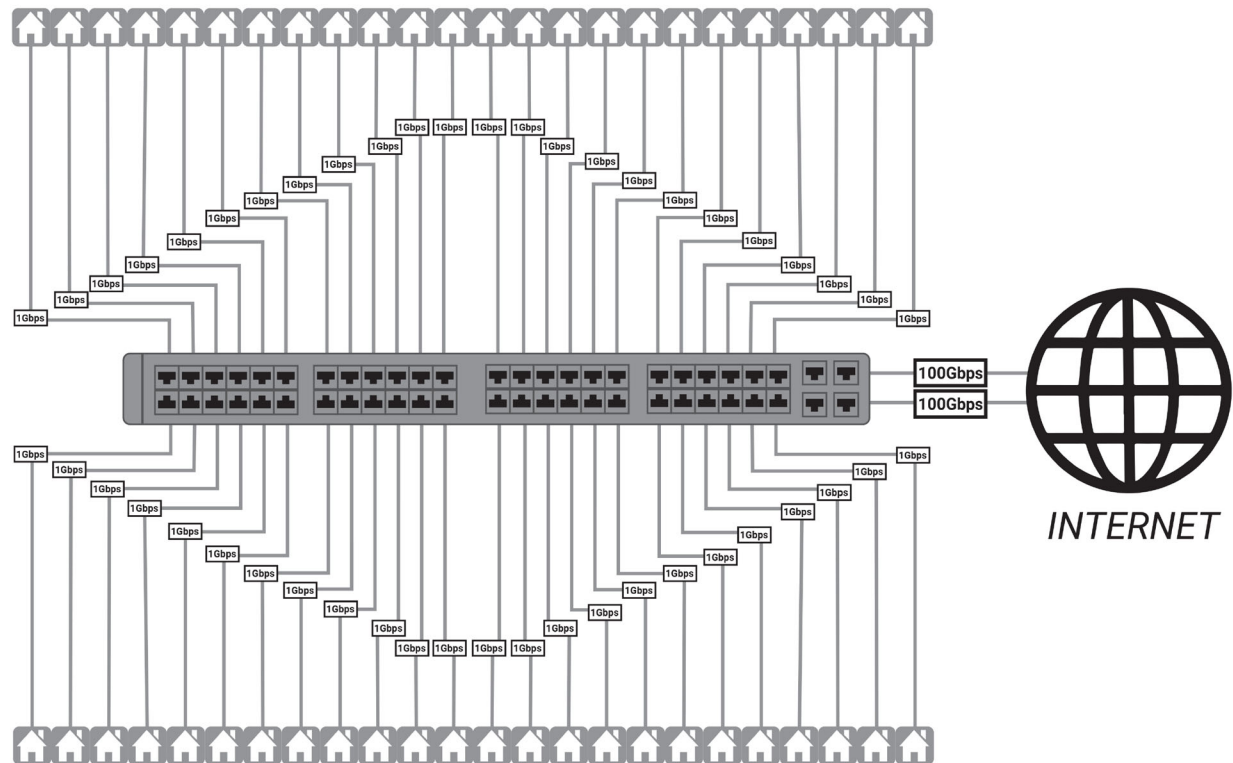
- Longer reach and high bandwidth
- Secure reliable transport
- Limited EMI/RFI exposure
- Low latency

The network design includes:

- Fail safe redundancies
- Inclusive of network routing
- UPS and generator

This project will ensure that every location in the project will have reliable 100/100Mbps service or better, and this project will result in a solution that is highly scalable.

The following figure shows an AON system:



Currently, we are the Last-Mile provider connecting to the Middle-Mile facility. Other providers who are unknown at this time would be able to interconnect under appropriate circumstances with monetary restrictions being applied. Our project will use a “dig once” philosophy to provide future access throughout Sheboygan County.

Schedule

Sheboygan County Economic Development Corporation, in partnership with Bertram Communications, intends to complete the core components of the proposed project in this application by December 31, 2024.

- Construction Start Date: The providers are already collaborating and planning in the event this application is awarded. For this reason, we expect the start date to occur days after the official award occurs.
- Months 1-6: Finalize land arrangements, acquisitions or leases as required per site. Initiate requests to schedule any required county, township, village, or city board meetings. Verify and satisfy any environmental and FCC requirements. Permitting will coincide with these processes. As in the past, SCEDC and other local service groups will be used to communicate marketing materials and timelines. Radio equipment manufacturing and enclosures will be scheduled for production, and network designs will be finalized. Weather and agreements permitting, installation of equipment on leased sites will commence. Positive test results would allow for customer premise equipment installation. Network adjustments as required.
- Months 3-10: Finalize any land issues and/or lease agreements. Structure and equipment acquisitions. Begin construction of rate center sites.

- Months 6-12: Concrete, rate centers and site preparation work being finalized. Collaborative marketing efforts begin with municipalities, service groups, cooperatives, and media as appropriate.
- Months 6-18: Site equipment installation and testing on all rate centers sites as available and verify coverage maps.
- Months 6-24: Continue rollout of fiber conduit, rate center sites and customer premise equipment. Identify coverage trouble areas and adjust as necessary.

Service availability will be rolled out over time. We expect some areas will have 1x1Gbps service within the first year. Project completion date will occur before the December 31, 2024 deadline.

Itemized Budget

The Budget & Income Summary spreadsheet shows the total cost of the project rounded is \$3.17 million dollars. The Village of Random Lake, Random Lake School District and Bertram Communications combined are matching 57% of the total project. This is a total matching amount of \$1.806 million dollars. The matching results in the total broadband fund request to also be \$1.364 million dollars.

The details of the project costs are as follows:

• Contractual/Consulting Fees total cost	\$ 196,676.00
• Equipment total cost	\$ 455,210.00
• Supplies total cost	\$1,475,963.00
• Labor total cost	\$1,042,151.00

The fiber facilities required will be a combination of existing fiber and tower hut sites and vertical assets owned and operated by Bertram Communications and Sheboygan County. Difficult terrain will require additional supplies compared to other locations. In addition, purchases and/or easements will be required for new rate center hut construction.

The funds requested for this project will be used for the sole purpose of implementing the project defined in this application.

Matching funds of 57% will be provided between the Sheboygan County Economic Development Corporation and the provider, Bertram Communications. The funds requested will be used to construct broadband infrastructure along the Middle-Mile route that includes installation and testing of broadband services.

Priority Factors Supporting the Application

Matching Funds: Our total estimated cost of the project is \$3.17 million dollars. We have secured commitments to match funds at 57%. The following is a description of matching funds contributions:

- **The Village of Random Lake municipality has committed to provide matching funds in the amount of \$686,000**
- **The School District of Random Lake has committed to provide matching funds in the amount of \$90,000**

- **Bertram Communications LLC has committed to provide matching funds in the amount of \$1,030,000**
- **Total combined committed matching funds of \$1,806,000**

Private-Public Partnerships: The Sheboygan County Economic Development Corporation has agreed to partner with Bertram Communications on this broadband expansion grant and future grants.

Existing Broadband Service: According to the Wisconsin PSC Broadband Map, there is one broadband provider in the proposed unserved/underserved area of the Town of Rhine. Below is the type of broadband access offered to the proposed area and speeds.

Provider	Access Type	Download Speed	Upload Speed
Frontier Communications	Asymmetric xDSL	3.0Mbps	1.0Mbps
Frontier Communications	ADSL2, ADSL2+	12.0Mbps	1.0Mbps

The PSC Broadband Access Map indicates the proposed project area to be designated an unserved/underserved area in accordance with broadband expansion grant guidelines FY2022. The map shows the proposed project area to have access to speeds 10+Mbps download and 1+Mbps upload. The estimated number of customers serviced within the proposed footprint served by landline/DSL providers is 1,221 households. The estimated number of customers within the proposed footprint area served by competing mobile wireless is 1,221. The Village of Random Lake Highway 57 Phase I & II project does not plan to duplicate or overlap existing broadband infrastructure. The project will use buried fiber pods that can be accessed by each residential and business location individually, giving more access to residents and businesses that would not have access. The unserved/underserved location that could potentially connect through the proposed project is the Town of Rhine. In order to open access to the Town of Rhine from the Last-Mile location in the Village of Random Lake, we need to connect through Highway 57 which connects both locations. The use of buried pods allows for more business and residential consumers to connect without having to connect directly to the premises locations, this reduces cost of installation to customers as well and cost of construction ultimately reducing the overall cost of fiber to premises locations to residential and business locations in the proposed project area. The Village of Random Lake Highway 57 Phase I & II project will be using technology to provide fiber to premises locations in an innovative way that has yet to be introduced to the current broadband access infrastructure in the proposed area.

Project Impact

The identified unserved/underserved geographic location of the proposed project is the Town of Rhine. The Town of Rhine was established in 1852. It is a lush, green area in Sheboygan County that is primarily agricultural. Several segments of Wisconsin's 1,200-mile Ice Age Trail run through it. The town covers 34.6 square miles and it consists of a total of one square mile of water from its numerous lakes. The total estimated population in the area is 2,150 as of 2018 a 0.75 increase from 2010 (docs.legis.wisconsin.gov). Additionally, the surrounding areas such as Elkhart Lake which has an estimated population of 1,002 persons and the town of Plymouth which has an estimated population of 3,228 persons. Elkhart Lake serves as a tourist attraction, providing resorts and vacation getaways throughout the year that features the geographic natural resources. Additionally, the unserved/underserved proposed project area, the Town of Rhine is associated with four school districts;

Kiel, Elkhart-Glenbeulah, Howards Grove, and Plymouth, serving an estimated 5,041 students. As stated previously, the PSC Broadband Map indicates the current speeds within this area are 10+ Mbps download and 1+Mbps Upload speeds.

The applicant partners, Sheboygan County Economic Development Corporation and Bertram Communications, in a collaborative effort will implement the following initiatives to continually assist those in The Village of Random Lake, the Town of Rhine and the infrastructure route Highway 57, in accessing the broadband internet services both up to the completion of the project(s) by December 31st, 2024, and beyond.

- Design, implement and maintain web pages on the Town of Rhine and the Sheboygan County Economic Development Corporation's websites.
- Monthly or quarterly public notices

The applicant partners, SCEDC and Bertram Communications, in a collaborative effort, have determined the following:

- We will continue to provide a discounted price to those affected by COVID-19 until the official announcement that COVID-19 is no longer in the status of "pandemic".
- Qualified and validated/verified households with income below 200% of the federal poverty level will have access to fixed home internet service as part of or in combination of existing Access2School programs or other governmental programs at a cost of less than \$25.00 per month until such a date ends six months after the public health emergency is lifted or when the allocated money is depleted. Eligible households for the benefit include a household that meets any of the following criteria:
 - At least one person in the household must receive benefits from one of the following federal assistance programs: Medicaid, Supplemental Nutrition Assistance Program, Supplemental Security Income, Federal Public Housing Assistance, or Veterans and Survivors Pension Benefit.
 - At least one person in the household is in the free and reduced-price lunch program or the school breakfast program (including attending a Community Eligibility Provision school).
 - At least one person in the household has received a Federal Pell Grant in the current award year.
 - At least one person in the household can participate in their broadband provider's existing low-income or COVID-19 program.

Scalability

Using an AON network our scalability is nearly endless. The current project is scheduled to supply 1x1Gbps to each home. Our future goals entail delivering 10x10Gbps through simple module upgrades at our fiber huts.

We can use this Middle-Mile project as an open network to help other providers utilizing the "dig once" philosophy. This allows connectivity to communities from fiber huts strategically placed along the Middle-Mile as well.

Economic Development

Sheboygan Economic Development Corporation, Random Lake School District and the Random Lake Village Board have studies and documentation regarding the need for high-speed internet and its impact on the county areas. The connecting locations of this project are poised for significant economic growth and development. County leaders are planning and implementing new developments. However, growth depends to an ever-increasing extent on access to high-speed Internet. No business, no family, no store owner, no farm operator can afford to be in an area that lacks such access or in which the only options for high-speed Internet are costly, data-limited, and often slow cellular hot spots or unreliable satellite dishes.

Unserved and underserved areas of internet service would significantly hinder the anticipated natural growth of the Town of Rhine and the connecting Last-Mile and Middle-Mile route locations. In addition to the county's major employers, small, medium, and large businesses, for which high-speed Internet is a critical component of their operations, proposed project location and Sheboygan County has hundreds of in-home entrepreneurs, home-office professionals and micro-business owners located in rural areas for whom high-speed internet is no less critical.

The occupations of these rural property owners include auto repair, restaurants, wedding barns, small retail stores, contractors, metal and wood sculpture, beauty salons, welding shops, landscaping, federal firearms dealer, and massage therapy. In addition, we know anecdotally that many rural residents operate professional businesses out of their homes for which no conditional use permits are required. These occupations include realtor, insurance agent, investment advisor, writer, editor, photographer, and therapist.

City data shows four common business that would benefit from improved download and upload transmission speeds, food and service, construction, education and health care. Industries such as education and health care would greatly benefit from improved download and upload speeds. Education professional and students would be able to access online employment and educational opportunities. Health care professionals would be able to expand access to telehealth opportunities which would allow for community members to access health and wellness, and mental health; ultimately assisting in decreasing the incidence of mortality and untreated mental health conditions due to lack of care.

Brian Doudna, Executive Director of the Sheboygan County Economic Development Corporation states, "Lack of high-speed internet access is a major barrier to the economic development growth in Sheboygan County, and adversely impacts our regional competitiveness. According to the National Associations of Counties, only 67% of the rural population of Sheboygan County has access to broadband." Pat O'Brien, Executive Director of the Milwaukee 7 Economic Development Partnership (M7), representing the seven counties of Southeast Wisconsin says, "The lack of high-speed internet access is a major block to economic development in Sheboygan County. Economic development does not know political boundaries, Sheboygan County needs internet service that is on par with its neighboring counties." The unserved/underserved, the project route Highway 57, the Last-Mile location, the Village of Random Lake region; shares a labor pool, supply chains and businesses with operations in surrounding locations, with examples including Kohler, Johnsonville, Sargento, and Saputo. Additionally, education for the workforce of the future is crucial and broadband plays an ever emerging need to facilitate these efforts. The Middle-Mile route location and the unserved/underserved Town of Rhine is also home to telecommuters working for companies throughout the county into Milwaukee regions;

appropriate broadband capacity will help support these workers. Brian continues with, "Sheboygan County is a key location along the I-43 corridors, connecting Green Bay and the Fox Valley, Milwaukee, and Chicago. These corridors are significant to the state and the vitality of the future." For the unserved/underserved Town of Rhine, the connecting Middle-Mile route locations and the greater county of Sheboygan to be a part of the economic potential and growth, it must have connectivity in line with its neighbors on these corridors.

As we have discovered from the economic fallout of the Covid-19 pandemic the need for work from home opportunities have greatly increased. Residents who are limited in their employment opportunities due to location, distance, lack of transportation or lack of care would benefit a great deal from the ability to work from home. However, a significant portion of work from home positions require access to reliable high-speed internet with minimal speeds of at least 25Mbps and upload speeds of at least 1.0Mbps. We are offering download and upload speeds that far surpass these requirements and ensures telecommuters within the area can be competitive with other areas with higher speeds.

Effect Upon Broadband Service to Adjacent Areas

Our proposed project will not impair on competing broadband service providers' ability to expand access and provide service to adjacent areas. In fact, our project provides opportunities for other providers to utilize our network to extend their networks into adjacent areas.

Applicant's History and Experience Constructing Broadband Communications

Oconto, Shawano, Jefferson, and Dodge Counties have partnered with Bertram Communications and have been awarded multiple PSC broadband expansion grants, resulting in multiple successful largescale projects.

Under the CARES Act, Bertram Communications partnered with public, private and other ISPs to successfully erect eight (8) Class 3 towers for Jefferson and Dodge counties in an unprecedented 3-month timeframe, which is normally a 2+ year project.

This broadband expansion initiative will continue to assist in the planned major upgrade of the town and county's emergency communications system that began in 2020. It is anticipated that potential collaboration between these projects may create reduced costs and redundancy for emergency communications. The estimated cost of the communication project will be \$3.5 to \$5 million. Bertram has been involved in other grant projects and many other projects outside of grants using our own funding. We believe our actions regarding the CARES Act projects speak for themselves on our collective capabilities in successfully and responsibly utilizing such funds provided by the PSC, CARES Act, and if so, awarded the ARPA funding.

Bertram Projects

- PSC Broadband Expansion FY2017, 2018, 2019, 2020
 - The projects under these grants were completed fully and in time. In fact, 50% of the projects were completed in the first 18 months providing broadband to rural residents, businesses, and agricultural entities.
- CARES Act 2020
 - Bertram partnered with Jefferson and Dodge counties to meet very short timelines required by the PSC directed CARES Act application and grant process.

- Collaborations with multiple agencies (FCC, FAA, NEPA, State Representatives, Sheriff and Police Departments, Fire Departments, Emergency Management Units, and County Zoning) made it possible. This project was completed under the complex circumstances of the COVID-19 pandemic and an extremely short timeline to provide the service in under three (3) months.

Bertram Non-Grant Projects

Bertram is a highly established ISP throughout Wisconsin and has been maintaining and growing its high-speed broadband presence in rural areas for nearly 20 years.

- Fiber to MDU's & commercial buildings and campuses.
- Multiple other projects using fixed wireless throughout Wisconsin, Utah, the Upper Peninsula of Michigan, and northern Illinois have also been completed.
- Bertram implemented 5,200 FTTH locations in Utah since the beginning of 2021.
- Implemented 5 major projects outside of grants.

We can provide information upon request on any specifics required as this information will not be presented publicly.

How the Proposed Project Will or Will Not Duplicate Existing Broadband Infrastructure

Our proposed project uses fiber optic technology to deliver high-speed internet to consumers using FTTH buried in the ground. Currently, no other service providers are using buried fiber.

Financial Ability to Undertake the Proposed Broadband Construction Project

Bertram Communications has been in business for nearly twenty years. Over the last nineteen years, Bertram has expanded their network into Illinois and Utah. We have continued to grow financially and continue to be in good standing with all financial institutions we are associated with. As stated above, Bertram Communications has been highly successful in completing similar projects such as PSC Broadband Expansion FY2017, 2018, 2019, 2020 and the CARES Act grant. We have completed fiber to multi-dwelling units, commercial buildings and campuses, implemented 5,200 FTTH locations in Utah, and have implemented projects outside of grants.

Bertram Communications utilizes the "dig once" philosophy to allow Last-Mile providers to easily feed off the network or pass thru the network at industry standard rates without the need for extensive construction to accommodate said providers.

For Middle-Mile routes we will be using 288 strands of fiber. Currently, Bertram Communications is in discussions with the local FBI office for an undisclosed use, and the Sheboygan County Sheriff's Department and City of Plymouth for the new state DMR system. We are dedicating 2 strands of fiber per entity as well as other remote working FBI agents for their connectivity into government systems and/or redundancies. The design and installation of this project will conform to all applicable federal, state, and local requirements and standard engineering practices and the installed infrastructure will provide the service levels and speeds stated in this application.

The residents of the Village of Random Lake, the Town of Rhine and all townships in between are served by several health care systems including HSHS Lakeshore and St. Nicholas, Aurora, and Prevea Health Care. All these medical providers utilize online platforms such as MyChart to communicate with patients about test results, appointments, scheduled exams and tests, billing, and for doctors and patients to message each other directly. It is a big part of the way medical care is delivered and access to reliable Internet service now is crucial to the health and wellness of the people of residents and health care providers within the proposed project area. This is driven home by Kristin Blanchard Stearns, CEO of Lakeshore Community Health Care, who states, "Access to reliable high-speed internet can greatly enhance quality of life for Sheboygan County residents. Our mission is to improve the health and well-being of the communities we serve."

Without reliable internet access in the communities, patients will have barriers to accessing cost efficient and effective care. The internet's role in health care is here to stay and will grow as health care continues to evolve. In order for residents to be able to take advantage of service offerings designed to improve their health and well-being, they must have access to reliable broadband services.

In addition, the Town Rhine and Sheboygan County have been made aware of ongoing requests for connectivity to enable rural health care services. An introduction to services and devices made available through health care services from companies including OnKöl. The OnKöl devices act as a gateway that initially was designed to allow seniors to age in place. OnKöl seamlessly retrieves and distributes medical and activities-of-daily-living data to patients, family members, care givers and providers with real time support, reminders, and warnings. The platform can be configured for use across all life stages and can integrate into existing EMR, Chronic Care and PopHealth software systems. The solution can be used for Chronic Care Management, Post-Acute Monitoring and Home Care Services. What is unique about the solution is that it verbally communicates to the patient what needs to be done (medication, PulseOX measurement, blood pressure, etc.) and takes the readings automatically for accurate reporting. It then communicates to the patient what the results are as it simultaneously passes it back to the health system, care giver or family member based on preset thresholds. In addition to patient monitoring device integrations, OnKöl seamlessly connects to various IoT products and emergency response devices. The solution increases patient independence increases patient adherence and compliance to prescribed activities and medicine and reduces costly admissions and readmissions. It is of critical importance to note that this is another example of why these rural areas such as the Town of Rhine and the surround area of Sheboygan County require a broadband solution.

How the Proposed Project will Affect the Ability of Students to Access Educational Opportunities from Home

The proposed project will service four school districts, which services a total number of 5,041 students in K-12. A significant student population lives in the agricultural and rural areas in Sheboygan County. The rapid growth of technology has become part of the world of education. Students use technology daily in classrooms through school computers and tablets. This technology is used for schoolwork, homework, and learning. Internet research has become the norm and the expectation for students in a multitude of subject areas. There are opportunities for children and adults interested in post-secondary education to take online courses that are otherwise not available to them but limited broadband access to our families puts them at a disadvantage, as they are unable to work from home. Right now, student's internet options are limited and lacking in rural areas. Without equal access for all our students, they are not on a level playing field in relation to other students in the county and throughout our entire state. The Random Lake School District Administrator, Mike Trimberger, stated, "The District embraces our

mission to be the road to a better tomorrow for all students. In response to the need for reliable and accessible internet, one of the ways we created equitable experiences for all the children we serve is our investment in technology.” Mr. Trimberger is a “believer” that improving the internet service and increasing the broadband coverage in Sheboygan County will support the schools’ efforts to open the world to every learner. With Random Lake being the Last-Mile provider, schools located within the unserved/underserved Town of Rhine can also increase their students’ access to the technology needed to be competitive academically.

Bertram Communications and the Village of Random Lake have committed to provide funding. The Random Lake School District has provided a letter of intent for funding. We also have letters of support from local businesses, fire department and EMS.

Sheboygan County has updated and refined the vision of their strategic plan for broadband expansion. On June 23, 2021 at the UW-Green Bay Sheboygan Campus, Bertram Communications and the Sheboygan County Economic Development Corporation presented their broadband expansion vision to Sheboygan County government leaders. Then on July 16, 2021, Bertram and Joe Ruth presented their vision to the Wisconsin Towns Association. SCEDC has entered into a memorandum of understanding with Bertram Communications for the purpose of applying for PSC, ARPA and other future grants.

**RESOLUTION SUPPORTING BROADBAND EXPANSION PROJECTS AND GRANT APPLICATIONS
VILLAGE OF RANDOM LAKE, WISCONSIN**

WHEREAS, there are, or will be millions of state and federal broadband expansion grants available to eligible applicants, and

WHEREAS, Bertram Communications (Bertram) has contacted the Village of Random Lake with a request to work to improve broadband service in Random Lake, Sheboygan County, Wisconsin, and

WHEREAS, significant geographic areas and many households in Sheboygan County don't have reliable, high-speed internet access, and broadband expansion would allow greater access to educational options, medical and mental health management, social interaction, and recreational and entertainment options, and

WHEREAS, Bertram is currently engaged in engineering analysis designed to produce detailed project parameters and cost estimates to be used to compile a complete Broadband Expansion Grant application, and

WHEREAS, the Broadband Expansion Grant process is extremely competitive, and applications that demonstrate a public/private partnership are evaluated higher than those that do not, and

WHEREAS, the Village of Random Lake supports Bertram's grant application and is interested in serving as a fiscal agent in grant administration;

NOW, THEREFORE, BE IT RESOLVED that the Village Board of the Village of Random Lake, Sheboygan County, Wisconsin supports Bertram's application for grant funds for the purpose of upgrading broadband service in the Village of Random Lake and authorizes the Village President and Clerk/Treasurer to submit an accompanying letter of support.

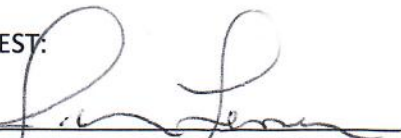
BE IT FURTHER RESOLVED that the Village President and Clerk/Treasurer are authorized to execute similar letters of support of broadband grant applications on behalf of other service providers whose proposal for broadband expansion would serve the residents of Random Lake.

Adopted this 14th day of March, 2022.

Village Board, Village of Random Lake
Sheboygan County, Wisconsin

By: 
Michael San Felippo, President

ATTEST:

By: 
Jo Ann Lesser, CMC, WCMC
Clerk/Treasurer



March 11, 2022

Brian Doudna
Sheboygan County Economic Development Corporation
508 New York Ave- Room 209
Sheboygan, WI 53081

James Bertram
President & CEO
Bertram Communications LLC
300 Industrial Drive
Random Lake, WI 53075

Dear Mr. Doudna and Mr. Bertram,

Please accept this letter from the Village of Random Lake in support of the PSC Broadband Expansion Grant for the Village of Random Lake in Sheboygan County, Wisconsin. I have also included a copy of the Village of Random Lake Resolution in support of the grant application, including our pledge of \$1,176,000 in financial support of the PSC Broadband Expansion Grant.

The economic benefit from this assistance is great. We frequently hear from various types of businesses that need to have dependable and high quality broadband and internet services. It is believed that this grant will assist in bringing broadband and internet services to the areas and will be much more dependable and high quality, enabling the businesses and residents to be more efficient and profitable.

On behalf of the Village of Random Lake citizens, the Village wants to express our complete support for the grant application for broadband being applied for this month by Sheboygan County Economic Development Corporation and Bertram Communications LLC. Consideration by the Public Service Commission of Wisconsin for this grant application will be greatly appreciated.

Respectfully,

A handwritten signature in blue ink, appearing to read "Mi San", with a stylized flourish at the end.

Michael San Felippo
Village President

SCHOOL DISTRICT OF RANDOM LAKE

"Providing tomorrow's leaders with a distinct advantage."

Michael Trimberger Ph.D.
District Administrator

Phone: (920) 994-4342
Fax: (920) 994-4820
Website: www.rladvantage.org



Susan McDonald, HS/MS Principal
Phone: (920) 994-9193
Phone: (920) 994-2498

Sandra Mountain, ES Principal
Phone: (920) 994-4344

Strong Classrooms. Strong School Culture. Strong Community Connections.

March 3, 2022

Dear James Bertram:

On behalf of the School District of Random Lake, I am writing to express our full support of Bertram Communications' expansion of broadband. This plan will help the issues with internet connectivity that our families experience, as well as our vision of leveling out the playing field for our students through technology.

The School District of Random Lake is a small, rural district with family farms and fallow land that fills the landscape between our small villages and makes it harder to receive internet services. Our District embraces our mission to provide tomorrow's leaders with a distinct advantage but needs reliable and accessible internet. One of the ways we created equitable experiences for all children is our investment in technology. Every student, from kindergarten to 12th grade, has access to iPads or laptops, and with more broadband this will allow more access to the internet for our students and their families.

We firmly believe that improving the internet service and increasing the broadband coverage in Sheboygan County will support our efforts to open the world to every learner and are willing to contribute all of the \$90,000 we estimate to receive from the Emergency Connectivity Grant (ECG) because we believe this will substantially help our students learn and grow into responsible, engaged citizens.

Sincerely,

Michael Trimberger, Ph.D.
District Administrator



Random Lake Fire Department

718 Spring Street, Random Lake WI 53075
Emergency # 911 Daytime (920) 207-8561
www.randomlakefiredept.org



Fire, Rescue & EMS

Fire Chief

Pat Depies

(920) 946-1848

Asst. Fire Chief

Aaron Schmit

(920) 254-6047

Asst. EMS Chief

Jacob Williamson

(920) 207 8561

Secretary

Rachel Uelmen

Treasurer

Amy Schmit

Chief Engineer

Bill Singer

Training Officer

Laura Feider

Active Members

Bob Arndt Rt Chief

Chad Arndt

Steve Aschebrock

Bill Bahr

Brian Bahr

Jim Barton

Dave Balzer

Andy Birenbaum

Chris Birenbaum

Kaila Bloemers

Chris Carter

Dan Carter

Marcus Demler

Dean Dolence

BJ Depies

Brandin Depies

Jim Depies

Joan Edwards

Kyle Garbsch

Dylan Heimerl

Joe Huiras

Kandy Huiras

Nancy Jacoby

Phil Jacoby

John Juhre

Kathy Kopping

Andrew Martens

Dan Murphy

Kurt Ploof

Dan Scholler

Jack Scholler

Jim Scholler

Dennis Schulz

Taylor Singer

Al Springstroh

Tim Stiltner

Dan Uelmen Jr

Don Vetter

Clay Wallace

Miles Wegner

Dave Wenske

Blaine Werner

Tim Winter

March 11, 2022

James Bertram
Bertram Communications

Re: Bertram Communications

Dear Mr. Bertram:

The Random Lake Fire Department is a fire and EMS emergency response department that covers 50 square miles in area, operates in Sheboygan County and is contracted with multiple municipalities. We strongly support Bertram Communications' efforts to bring additional towers online quickly. The Random Lake Fire Department provides emergency response and EMS transport to remote rural areas throughout Sheboygan County and is in need of improved radio communications that these towers can provide.

Additionally, these towers assist the Random Lake Fire Department when responding to major incidents throughout our area and response for mutual aid to other departments, including motor vehicle accidents, life safety incidents, hazardous materials, and structure fires, that require constant communications for the safety and well-being of our organizations and community that we protect. We rely on our generous partners, such as Bertram Communications, to achieve our communication standards.

We respectfully request that you take test factors into account when making your determination regarding the proposed towers.

Sincerely,

Patrick Depies
Fire Chief
Random Lake Fire Department



TERRY KATSMa

STATE REPRESENTATIVE • 26th ASSEMBLY DISTRICT

Phone: (608) 266-0656
Toll-Free: (888) 529-0026
Rep.Katsma@legis.wi.gov

P.O. Box 8952
Madison, WI 53708-8952

March 9th, 2022

Public Service Commission of Wisconsin
P.O. Box 7854
Madison, WI 53707-7854

Dear Sir or Madam:

I am writing to express my strong support for Bertram Communications LLC bid to be awarded a broadband expansion grant for the Village of Random Lake, which the company intends to use to fund fast and reliable internet to residents and businesses.

In today's technology-based economy, high-speed internet is a crucial component to the success of our students and the ability for small businesses to compete on a global scale.

As a member of the Wisconsin State Legislature, I care deeply about opportunities for our communities to attract new business interests, provide quality jobs for Wisconsin residents and strengthen their reputations as excellent places for families to live. This grant would help provide underserved areas of Sheboygan County with vital access to broadband services.

I appreciate the opportunity to voice my strong support for this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Katsma", written over a light blue horizontal line.

Representative Terry Katsma
26th Assembly District

The Sounder

405 2nd St., P.O. Box 346, Random Lake WI 53075-0346 • 920/994-9244

March 9, 2022

Sarah Lawrenz
Jim Bertram
Bertram Communications, LLC
300 Industrial Drive
Random Lake, WI 53075

Dear Sarah and Jim,

Subject: Letter to Support Bertram Communications for the Broadband Expansion

As editor of Random Lake's weekly community newspaper, The Sounder, I fully support Bertram Communications' efforts to improve broadband in our area. We need high speed internet to produce our newspaper every week -- and that type of service is pretty much a requirement for anybody living in 2022.

We welcome the opportunity to support this initiative, which will help everyone from school aged children to our local businesses. Over the years we have seen Bertram Communications grow to become a cutting edge technology company. With the availability of high speed internet for everyone in Random Lake, Bertram Communications will be able to provide every more great service. Thanks -- feel free to contact us for more information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary Feider".

Gary Feider, editor 920-994-9244